State of Iowa Manufacturer API guide

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Version History

Version Number	Date	End Point	Change Note
3.7	12/1/2019		Initial version for start
			of program
3.8	3/20/2019	Process Lot	Added completion to
		Product Lot	processes
4.0	3/28/2019	All sections	Added page numbers,
			object definitions and
			modified field
			descriptions
4.1	4/8/2019	Plant	Combined potted date
			and identified date
		Batch	Clarified plants can be
			added/removed up until
			plant harvested
		Process Lot	Removed solvent
			quantity and added
			process lot to
			adjustment where
			solvent is identified
4.2	4/9/2019	Batch	Definition of batch at
			harvest
		Process Lot	Added end points for
			process lot subs
4.3	4/16/2019	Fields	Deleted fields the state
			felt were no longer
			required
			Clarified definitions
4.4	4/22/2019	Additives	Page 24 Create an
			additive adjustment
4.5	6/7/2019	CBD Isolate	Added endpoint to
			track CBD isolate (page
			16) and consumed in
			the product lot (page
			19)
4.6	8/16/19	Sub Process Lot and	Added weights to sub
		Product Lot	process lots and how
			those will be consumed
			in product lot (Pages 16
	10/10/5		and 20)
5.0	10/10/2019	Updated Indicated by	Update URL, Batch,
		**	Process Lot, Product
			Lot relationships,
			Consolidated Endpoints

5.1	11/5/2019	Process Lots	Update Process Lot end
			points to allow for
			Crude, Winterized Oil
			and Process Lot
			(Distillate) Multi to
			Multi relationship
5.2	1/21/2020	Lot Completed flag	Updated all complete
		Package lot location	flags to t/f
		Adj/waste for crude an	d Package lot location no
		winterized oil	longer required
			Adjustments and waste
			need to indicate if
			crude/winterized oil
6.0	8/22/2020	latest version to be use	d Overview, removed
		with validation guide	asterisks, included
			postman curl requests
6.1	02/26/2021	extraction endpoints	removed crude and
			winterized endpoints;
			add batch to process lot
			endpoint added

Overview

The Iowa Department of Public Health (IDPH) provides the compliance system for the Medical Cannabidiol program. This system is the master repository of all data related to the manufacturing, sales and inventory management for all licensees in the program. Manufacturers and Dispensaries are required to send all compliance data to the system through an Application Program Interface (API) real time. The API for this program is a post only system, meaning that you do not have the ability to retrieve data from the API. No records are created by the state system, so all of the records for your company were created by the interaction with the API. This API Integration Guide should be used in conjunction with the State API Validation process to ensure a manufacturer can successfully send all API transactions to the state system.

Middleware API Overview

The system provided by (IDPH) through OstriJ is a one-way API where each event that needs to be reported to the state system is a unique end point. This document reviews each event, the end point details, the fields with data type and if a field is required or optional. The flow chart listed in the introduction is to be used as a general guideline for the timing of each event. The state requirements supersede the flow chart as events may occur in a different order based on each manufacturer's process. Data Integration will consist of data being posted or updated from the Manufacturer system to the State compliance system. The state system will not make outbound calls to the manufacturer and the data containing in the State system cannot be queried.

All External ID's will have a Manufacturer prefix, and an object indicator following the prefix, to indicate the organization and ensure unique ID's are used across the statewide program. Each record will have a unique ID that is generated by the Manufacturers system. External ID's will be Alpha numeric and not less than 16 characters. External ID's can be reused in the Sandbox and Production systems.

Request Details

```
POST Format https://ostrij.io/runflow/{FlowURL}
```

Content-Type - application/Json

Authentication – Not Needed. Each Flow ID is encrypted, and authentication Is handled in middleware.

Parameters – See events below for expected parameters per request.

Example Requests:

Single Item No Related Date

Postman CURL example

The following CURL can be entered in Postman (An API testing tool) to ensure that your data is correct for each endpoint.

```
curl --location --request POST
'https://ostrij.io/runflow/{flowURL} \
--header 'Content-Type: application/json' \
--data-raw '[
  {"Company ID": "1214",
   "Room ID": "2800",
   "Immature Plant Group ID": "KDP0000123",
   "Employee ID": "EMP-010115",
   "Initial Count": "250",
   "Strain": "KELLY CBD",
   "Group Type": "CLONE",
   "Planted Date": "2019-10-01",
   "Mother Plant":"",
   "Id":7445}
     ] '
Details of the Data
HEADER Content-Type application/json
BODY [for single records]
  {"Company ID": "1214",
   "Room ID": "2800",
   "Immature Plant Group ID": "KDP0000123",
   "Employee ID": "EMP-010115",
   "Initial Count": "250",
   "Strain": "KELLY CBD",
   "Group Type": "CLONE",
   "Planted Date": "2019-10-01",
   "Mother Plant":"",
   "Id":7445
  }
]
```

```
Bulk API – Multiple Items with no related items
HEADER Content-Type application/json
BODY [for Multiple records]
BULK Operations, Send an array of records where applicable
        "Room ID": "4879",
        "Immature Plant Group ID": "123456",
        "Employee ID": "EMP-01112",
        "Initial_Count": "20",
"Strain": "BlueDesl",
        "Group Type": "Clone",
        "Planted Date": "2019-03-21",
        "Mother Plant": "98765433"
        "Room ID": "4879",
        "Immature Plant Group ID": "123457",
        "Employee ID": "EMP-01112",
        "Initial Count": "10",
        "Strain": "DosiDo",
        "Group Type": "Clone",
        "Planted Date": "2019-03-21",
        "Mother Plant": "9876564"
        "Room ID": "4879",
        "Immature_Plant_Group_ID": "123458",
        "Employee ID": "EMP-01112",
        "Initial Count": "30",
        "Strain": "XJ10",
        "Group Type": "Clone",
        "Planted Date": "2019-03-21",
        "Mother Plant": "9876557"
]
Single Item with Related Items
HEADER Content-Type application/json
BODY [When sending multiple items in one object]
      {
            "Company_ID": "313",
            "Employee_ID": "789456123",
            "Reconciliation_ID": "456789123",
            "Retry": "",
            "Line": [
                         "Room ID": "445",
                         "Quantity": "210",
                         "Unit Of Measure": "Gram",
```

Response Details

200: Success 500:System Error 401:Malformed Data

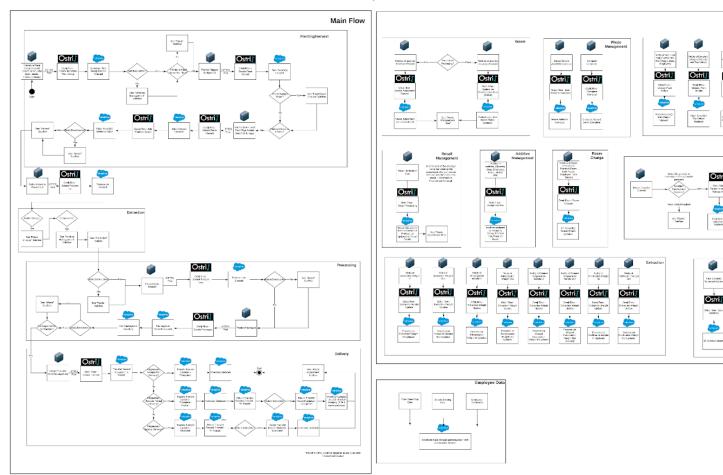
Pre-populated Data

When a new licensee is integrating with the state there are a set of record IDs that must be pre-populated in the system. Licensee will need to coordinate the following information with the state:

- Room Provided by the licensee Name, ID
- Employee Entered by the Licensee ID Provide by the state system

Process Flow:

Iowa Department of Public Health Medical Canabidiol Process Flow



Events

Event: Create an Immature Plant Group (IPG)

Object definition: An immature plant group is created when seeds or clones are propagated on the same day from the same strain and source (mother or seed) and are grown in the same conditions (together). This IPG can be created from multiple trays. Example: 50 clones of the same strain are started on the same day from the same mother and propagated in 5 trays of 10 plants each tray, in the same conditions. A single IPG can be created with 50 clones in the initial count. The planted date and mother are identified. The strain, group type (clones, seeds) employee that planted them and the room they are in are also identified.

IPG is considered complete when the initial count is converted into plants, all destroyed via waste, or the total plants and waste count equal the initial count.

Event Description – When each immature plant group is created.

Dependencies – Employee and Room must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the
			company related to this record
Room_ID	Text (255)	Υ	External System ID for the room
Immature_Plant_Group_ID	Text (255)	Υ	External ID for the Immature
			Plant Group (IPG)
Employee_ID	Text (255)	Υ	External ID of employee
			creating the IPG
Initial_Count	Number (5, 0)	Υ	The count of items in the IPG
Strain	Text (255)	Υ	The Cannabis Strain of the
			Mother Plant
Group_Type	Text (Picklist)	Υ	Seeds, Clones
Planted_Date	Date	Υ	YYYY-MM-DD
Mother_Plant	Text (255)	Υ	External ID for the Mother Plant

Event: Create / Update Plant (Bulk Operation enabled, Send Array to improve performance)

Object definition: When plants are moved and/or growing phases change, these must be logged. Rooms and employees are pre-populated so they just need to be selected. This event requires previous room moved to current room, the date moved and the employee that moved it. The growing phase and status are also required when they change. This would be a natural part of movement. Example: Moved from veg room to flowering room changes the growing phase and move from flower to harvest also changes the plant status from growing to curing. When a plant reaches flowering it will either be designated as a Mother plant, or assigned to a batch and processed.

Event Description – Each time a plant is moved to a different room or the state of that plant is changed it is reported via this API

Dependencies – The related plant, rooms and employee must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
	Text (255)	Υ	External System ID for the
Company_ID			company related to this record
	Text (255)	Υ	External System ID for the plant
Plant_ID			ID
Immature_Plant_Group_ID	Text (255)	Υ	External System ID for the IPG ID
Tagged_Date	Date	Υ	YYYY-MM-DD
	Text (255)	Υ	External ID of the employee
Tagged_by_Employee			moving the plant
	Boolean	N	(true, false) Select if this is, or
Mother_Plant			becomes, a Mother Plant
Previous_Room	Text (255)	Υ	External ID for the Original room
	Text (255)	Υ	External ID for the Destination
Current_Room			room
	Text (255)	Υ	External ID of the employee
Moved_by_Employee			moving the plant
Moved_Date	Date	Υ	YYYY-MM-DD
Growing_Phase	Text (picklist)	Υ	Vegetative, Flower, Curing
Plant_Status	Text (Picklist)	Υ	Growing, Destroyed, Harvested

Event: Create / Update Batch

Object definition: A batch ID is created at the time of plant harvest. A batch is defined as: a specifically identified quantity of dried flower and other cannabis plant matter that is uniform in strain or cultivar, harvested at the same time, and cultivated using the same pesticides and other crop inputs. Once a batch is harvested, the wet weight and dry weight of the harvested batch are required. Once a batch is consumed by process lots (extraction) it is critical to mark this batch is complete (consumed) or the batch will remain open (not consumed). Harvest weight should be provided in total grams at the batch level. A waste adjustment should be made at the batch level so moisture loss of the batch can be calculated. Moisture loss = Wet Weight of batch – Waste of batch – dry weight of batch plant material ready for extraction (ground biomass).

Event Description – Creation of a batch for plant tracking. Updating wet weight and dry weight of batch.

Dependencies – Room must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the
			company related to this record
	Text (255)	Υ	External System ID for the new
Batch_ID			batch
Room_ID	Text (255)	Υ	External ID for the room
	Date	N	YYYY-MM-DD is the date when
Batch_Created_Date			weights were entered
Employee_ID	Text(255)	Υ	External ID of the employee
			creating the batch
Harvest_Weight	Number (10, 2)	N	Wet weight (g) of the harvested
			batch, Required for Harvest
Cured_Dry_Weight	Number (10, 2)	Ν	Dry weight (g) of the harvested
			batch, Required when curing is
			completed
Batch_Processed	Text (Picklist)	N	true/false (t/f)

Event: Add Plant to Batch (Bulk Operation enabled, Send Array to improve performance)

Object definition: Plants are added to the batch at harvest and become a permanent part of that batch. Plants cannot be moved out of a batch once they are part of that harvest batch. See create/update batch for batch ID and batch created date.

Event Description – Add a plant to a batch.

Dependencies – Create batch first, Plants must exist, plants must not be in harvested stage

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the
			company related to this record
Batch_ID	Text (255)	Υ	External System ID for the batch
	Text (255)	Υ	External System ID for the plant
Plant_ID			ID .

Event: Create / Update Process Lot

Object definition: A process lot represents extracted and refined medical cannabidiol that will be used as an ingredient in a medical cannabidiol product. The date the process lot is completed and the total weight of purified oil produced for this process lot must be recorded, along with the employee who completed the extraction process. This endpoint establishes the unique ID for a process lot and allows updates for oil output weight and completion when the oil lot is consumed (no longer available as inventory).

Event Description – This event tracks the creation and completion of the process lot

Dependencies – Rooms and Employee must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Y	External System ID for the
			company related to this record
	Text (255)	Υ	External System ID for the
Process_Lot_ID			process lot
	Text (255)	Υ	External ID for the Destination
Current_Room			room
	Date	N	YYYY-MM-DD is the date when
Purification_Date			weights were entered
_	Number (10, 2)	N	Purified oil weight at the end of
Purified_Oil_Output_Weight	, ,		the purification process
	Text (255)	Υ	External System ID for the
			Employee performing the
Purification_Employee_ID			purification
	Number (10, 2)	N	Unit of measure of the extracted
	, ,		oil weight
			Accepted Values are (gallons,
Output_Oil_UOM			liters, grams, kilograms)
Process_Lot_Complete	Text (Picklist)	N	true/false (t/f)

Event: Add Batch to Process Lot

Object definition: Once a process lot ID is created, the weight of the batch (plant material) used to create the process lot can be recorded. The plant material weight and each batch of plant materials used to create the process lot. Plant Input Weight must be in grams. Multiple batches of plants can go into a single process lot.

Event Description – This event records the plant material consumed to create the process lot.

Dependencies – Process Lot must exist, Batch(s) must exist and contain unused plant weight

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Y	External System ID for the company related to this record
Batch_ID	Text (255)	Y	External System ID for the new batch
Process_Lot_ID	Text (255)	Y	External System ID for the Process lot
Plant_Input_Weight	Number (10, 2)	Y	Weight of all plant material used for this process lot from each batch

Event: Create / Update Isolate Process Lot

Object definition: When CBD isolate has been purchased for use in the manufacturing process, the state will track this inventory and use of this process lot type just like other process lots. The difference is there are no predecessor lots, batches, plants, or IPGs tied to this type of process lot as those are unknown. The CBD isolate will be tested just like other process lots to ensure contaminants are within thresholds. The isolate will be tracked through completion like other process lots as they are consumed.

Event Description – This endpoint creates a unique isolate process lot type. The CBD Isolate process lot is created when received by the manufacturer. The quantity and unit of measure identify the amount of CBD Isolate purchased. The room where the isolate is stored should be indicated as the current room. This endpoint tracks the creation and completion of the isolate process lot.

Dependencies – None

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the
			company related to this record
	Text (255)	Υ	External System ID for the
Process_Lot_ID			Existing Parent Process Lot
	Number (10,2)	Υ	The Quantity of CBD Isolate
Isolate_Quantity			product in this lot
	Text (255)	Υ	Unit of measure of the CBD
			Isolate. Accepted Values are
Isolate_UOM			(grams, kilograms)
	Text (255)	Υ	External ID for the Destination
Current_Room			room
Process_Lot_Complete	Text (Picklist)	N	true/false (t/f)

Event: Add/Update Products

Object definition: All products that are produced by the manufacturer need to be identified here. The type of product, the product name (as labeled to the consumer) the product SKU and the product ID are created and maintained here.

Event Description – Finished Good products will be referenced throughout the system. This end point is designed to map the product ID to the products available for each manufacturer

Dependencies – Company must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the
			company related to this record
Product_ID	Text (255)	Υ	External System ID for the product
SKU	Text (255)	Υ	Product SKU
Product_Name	Text (255)	Υ	Plain name for the product
	Text (255)	Υ	Form of the product (Capsule,
	, ,		Tincture, Cream, Lotion,
Туре			Suppository)

Event: Create / Update Product Lot

Object definition: The product lot is the starting point for the product in bulk form before being at a sellable state. The date the product lot is manufactured, the product type and the total weight produced for this lot must be recorded. **See Event: Add Process Lot to Product Lot for updating process lot input.** This endpoint establishes the unique ID for a product lot and allows updates for product lot output weight and completion when the product lot is consumed (no longer available as inventory).

Event Description – This event tracks the creation and completion of the product lot

Dependencies – Process Lot(s), Product lot, Rooms and Employee must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Y	External System ID for the company related to this record
Product_Lot_ID	Text (255)	Υ	External System ID for the Product Lot
Expiration_Date	Date	Υ	YYYY-MM-DD
Previous_Room	Text (255)	Υ	External ID for the Original room
Current_Room	Text (255)	N	External ID for the Destination room
Manufacture_Date_Time	Date	N	YYYY-MM-DD is the date when products were created
Product_Type	Text (Picklist)	Υ	Capsule, Lotion, Tincture, Vape
Quantity	Number (10, 2)	N	The Quantity of raw material product produced in the Lot
	Text (Picklist)	N	Grams for the quantity produced – need to add "each" to picklist
Unit_of_Measure			for capsule or vape product lots
	Text (255)	Υ	External ID of the employee
Employee_ID	·		completing the product process
Product_Lot_Complete	Text (Picklist)	Ν	true/false (t/f)

Event: Add Process Lot to Product Lot

Object definition: Now that we have created a product lot ID we can add both process lot (distillate oil) and isolate to the product lot. The input weight is used to calculate the total input to the product lot and reduction of usable material from the process lot(s). Multiple process lots can be associated with multiple product lots. **A new payload is required for every process lot input added to this product lot.**

Event Description – Once Process and Product lots are created the relationship of input of process lot into product lot is managed by this end point. This simply creates a relationship between the lots for tracking of input and consumption.

Dependencies – Process Lot must exist, Product Lot must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Y	External System ID for the company related to this record
Product Lot ID	Text (255)	Y	External System ID for the Product lot
	Text (255)	Υ	External System ID for the
Process_Lot_ID			Process lot (oil or isolate)
	Number (10, 2)	N	Weight of Process lot Oil used in
Oil_Input_Weight			this product lot
	Number (10, 2)**	N	Weight of Process lot Isolate
Isolate_Input_Weight			used in this product lot

Event: Create/Update Package Lot

Object definition: The package lot is key for traceability back to the product lot, process lot and plants that produced it. The package lot is also maintained by the dispensaries so final sales of products can be traced back to this package lot.

Event Description – The package lot is the starting point for the process of taking bulk product and packaging it for sale. The package lot must be of the same product type as the origin product lot.

Dependencies – Process Lot, Product Lot, Rooms and Employee must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the company related to this record
	Text (255)	Υ	External System ID for the new
Package_Lot_ID			Package Lot
	Text (255)	Υ	External ID of the employee
Employee_ID			packaging the product

Event: Add Products to the Package Lot

Object definition: Once a package lot is created, product lots and products can be added to the package lot. The package lot quantity is the number of sellable units of product made from that product lot. Example: If the product lot is a gallon of cream, then that product lot could theoretically produce 128 one ounce bottles of cream (with no waste) for that package lot.

Event Description – When bulk product is put in to packaging to be shipped and sold products are added to the package lot at the time of packaging.

Dependencies – Process Lot, Product Lot, Employee and Package Lot must exist: Package must be the same product type as the origin product lot.

POST URL - See URL Reference

Field Name	Data Type	Required	Description
	Text (255)	Υ	External System ID for the
Package_Lot_ID			Package lot
	Text (255)	Υ	External System ID for the Product
Product_Lot_ID			lot
	Number (10, 2)	N for	Weight in grams of the product lot
Product_Lot_Input_Weight		capsules	quantity input for this package lot
Product_ID	Text (255)	Υ	External System ID for the Product
	Number (10, 2)	Υ	The count of individual sellable
			units that are output for this
Quantity_Output			package lot

Event: Create / Update Transfer Object

Object definition: Once products are ready to be shipped a transfer must be created indicating the driver and the vehicle information that will be used for transfer. The State of lowa uses a mobile transfer application for the driver to track chain of custody throughout the transfer.

Event Description – The transfer object is the starting point for the preparation of setting up a transport to another approved facility.

Dependencies – Process Lot and Product Lot must exist.

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the
			shipping company
	Text (255)	Υ	External System ID for the origin
Transfer_Lot_ID			transfer
	Text (255)	Υ	External System ID for the
Recipient_ID			receiving company
	Text (255)	Υ	External System ID for the Driver
Driver_ID			will be conducting the transfer
	Text (255)	Υ	External System ID for the
Employee_ID			Employee doing the packaging
	Text (255)	Υ	The make of the transport vehicle
Vehicle_Make			to be used for this transfer
	Text (255)	Υ	The Model of the transport
			vehicle to be used for this
Vehicle_Model			transfer
	Text (255)	Υ	The License Plate of the
			transport vehicle to be used for
Vehicle_License_Plate			this transfer
	Text (255)	Υ	The state of the license plate of
			the transport vehicle to be used
License_Plate_State			for this transfer

Event: Add Products to the Transfer

Object definition: This builds the transfer manifest and controls inventory records for the shipper and receiver. It is used for delivery to and from dispensaries and labs. A return transfer is not created via this API but when returns are made to the dispensary returns are generated by Salesforce. The State of Iowa uses a mobile transfer application for the driver to indicate when delivery has been made to the recipient. The State also has a secure site for the recipient to accept the transfer entirely, reject it entirely or partially accept this transfer. The inventory records are maintained by the state according to how much was delivered and received by both parties. This is the same mechanism used for returns of products to the manufacturer for destruction. All delivery of products, samples and returns are the responsibility of the manufacturer to accurately keep records of the transfer. Samples will be created as a product. Process Lot for the sample is assigned to the product (sample) in the transfer.

Event Description – Each transfer must contain all products, package lots of all items that will be transferred to the Lab or Dispensary.

Dependencies – Process Lot, Product Lot, Employee and Package Lot must exist., Line Item ID must be system unique to allow for updates.

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Y	External System ID for the company related to this record
Transfer_Lot_ID	Text (255)	Y	External System ID for the origin transfer
Package_Lot_ID	Text (255)	Y	External System ID for the Package lot
Process_Lot_ID	Text (255)	Υ	External System ID for the Process lot
Product_ID	Text (255)	Y	External System ID for the Product
Line_Item_ID	Text (255)	Y	System Unique External ID for this item on this transfer
Quantity	Number (10, 2)	Y	The count of individual units that are being transferred for sale or testing
	Currency	Y	The total list price of individual sellable units that are being transferred = unit price X quantity
Total List Price			(above)

Event: Update Products on the Transfer

Object definition: Update Existing product on an existing transfer

Event Description – If a change to quantity or price of a product on an existing active transfer needs to be done this end point allows for that change. The Line Item ID must be unique in the system. Removal of an item is done by updating quantity to 0, The item will remain listed on the Transfer but with zero quantity and price.

Dependencies – Line Item ID must exist and be system unique to allow for updates.

POST URL - See URL Reference

Field Name	Data Type	Required	Description
	Text (255)	Υ	System Unique External ID for this
Line_Item_ID			item on this transfer
	Number (10, 2)	Υ	The count of individual units that
			are being transferred for sale or
Quantity			testing
	Currency	Υ	The total list price of individual
			sellable units that are being
			transferred = unit price X quantity
Total List Price			(above)

Adjustments

Adjustments are made to items throughout the process. In this section we will provide the API for each type of adjustment. The objective of the state system is to ensure that there is traceability for all Plant, Oil and Product as well as a record of all additives used in the process of manufacturing CBD products. Adjustments fall in the following categories:

- Additives applied during the plant phase.
- Recording of Waste when any material is no longer viable or usable Adjustments can be made at any point in the lifecycle.

Event: Create an Additive Adjustment

Event Description — When an additive is introduced to the cultivation or extraction process this record must be sent. The state is interested in what additives are being used, not the quantity or dates (except pesticides) of those additive applications. Example: Each fertilizer/nutrient additive used in the life of a plant can be reported with a single entry. It is not necessary to record every time the fertilizer is applied.

Dependencies - Referenced IPG, Plant or Batch and Employee must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the
			company related to this record
	Text (255)	Υ	External System ID for the
Employee_ID			Employee applying additive.
	Text (picklist)	Υ	Fertilizer, Nutrient, Solvent,
Adjustment_Type			Pesticide
	Date	N	YYYY-MM-DD only required for
Adjustment_Date			pesticides
	Text (255)	Υ	Retail name or common name
			used by manufacturer of the
Product_Name			additive used
	URL	Υ	Link to the site containing the
			product Material Safety Data
			Sheet. If more than one product,
			please make multiple
MCDC Link			adjustments, one for each
MSDS_Link			product.
Immature_Plant_Group_ID	Text (255)	N*	External System ID for the IPG
	Text (255)	N*	External System ID for the plant
Plant_ID			ID
Batch_ID	Text (255)	N*	External ID of the Batch
Crude_Lot_ID	Text (255)	N*	External ID of the Crude lot
Winterized_Lot_ID	Text (255)	N*	External ID of the Winterized lot
Process_Lot_ID	Text (255)	N*	External ID of the Process Lot

^{*} NOTE: At least one record must be applied to the additive.

Event: Create a Waste Adjustment

Event Description – When any form of inventory needs to be destroyed for Plant, Oil, Product or Package this record must be sent. Harvest Waste is reported against the Batch object.

Dependencies – Referenced IPG, Plant of Batch, Process Lot, Product Lot, Package Lot and Employee must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
Company_ID	Text (255)	Υ	External System ID for the
			company related to this record
	Text (255)	Υ	External System ID for the
Employee_ID	, ,		Employee handling the waste
Waste_Collection_Date	Date	Υ	YYYY-MM-DD
Waste_Weight	Number (10, 2)	Υ	Weight of material going to waste
Immature_Plant_Group_ID	Text (255)	N*	External System ID for the IPG
	Text (255)	N*	External System ID for the plant
Plant_ID			ID
Batch_ID	Text (255)	N*	External ID of the Batch
Crude_Lot_ID	Text (255)	N*	External ID of the Crude lot
Winterized_Lot_ID	Text (255)	N*	External ID of the Winterized lot
Process_Lot_ID	Text (255)	N*	External ID of the Process Lot
Product_Lot_ID	Test (255)	N*	External ID of the Product Lot
Package_Lot_ID	Text (255)	N*	External ID of the Package Lot
Unit Of Measure	Text (255)	N*	Unit of Measure for Waste record

^{*} NOTE: At least one record must be applied to the waste adjustment.

Event: Send Inventory Reconciliation

Event Description – Every other week, the manufacturer is required to physically count all Plant, Oil, Product and Package items by location and phase. The report is a total count of each item in each room. The reconciliation data is compared to the State system inventory. In the event of a discrepancy a notification will be sent to the Manufacturer and the State. Subsequent reconciliations can be sent once the discrepancy is mitigated. If any items do not have a value, a zero value should be passed. It is critical that the manufacturer mark completed batches, process lots and package lots so they do not continue to appear as open inventory items.

Dependencies – Referenced IPG, Plant of Batch, Process Lot, Product Lot, Package Lot and Employee must exist

POST URL - See URL Reference

Field Name	Data Type	Required	Description
	Reconciliation	Record	-
Company_ID	Text (255)	Y	External System ID for the company related to this record
Employee_ID	Text (255)	Y	External System ID for the Employee accountable for the physical inventory
Reconciliation_ID	Text (255)	Y	External System ID for the Reconciliation request
Retry	Boolean(true, false)	N	True if the reconciliation is a retry after a failure
	Inventory Line	e Items	
Room_ID	Text (255)	Υ	External ID of the room
Quantity	Number (10, 2)	Υ	Total count of each line item
Unit_Of_Meausure	Number (10, 2)	Υ	Unit of Measure of each line item
Туре	Text(255)	Y	Type / Form of material being counted (plants, harvested plant material, purified oil, finished product by SKU)